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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,335	06/26/2001	Jin-Lin Chen	MSI-913US	1132
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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			RIES, LAURIE ANNE	
		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/893,335	CHEN ET AL.
	Examiner	Art Unit
	Laurie Ries	2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 October 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 16-23 and 25-58 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 29-42 is/are allowed.
 6) Claim(s) 16-23, 25-28 and 43-58 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 June 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 10/31/07.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 31 July 2007, to the Original Application, filed 26 June 2001.
2. The rejection of claims 16-23 and 25-58 under 35 U.S.C. 102(a) as being anticipated by Chen ("Function-Based Object Model Towards Website Adaptation") has been withdrawn.
3. The rejection of claims 31-42 under 35 U.S.C. 103(a) as being unpatentable over Sahota (U.S. Publication 2005/0108637 A1) has been withdrawn.
4. The rejection of claims 45-53 under 35 U.S.C. 103(a) as being unpatentable over Sahota (U.S. Publication 2005/0108637 A1) in view of Anderson (U.S. Patent 5,537,526) has been withdrawn.
5. Claims 16-23 and 25-58 are pending. Claims 16, 26, 29, 31, 43, 45, and 54 are independent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 43-45, 49-50, 53-54, 56, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Manola ("Towards a Web Object Model").

As per independent claim 43, Manola discloses a web content adaption method that adapts web content from one format to another, and which uses multiple function-based object models to do so (see Manola, Section 3), where the function-based object models include models that pertain to (1) basic objects that include a smallest information body that cannot be further divided, such as Java applets that perform functions such as playing a sound (See Manola, Section 2.3.2), and (2) composite objects that include objects that can contain other objects, such as pages, which have data structured in clusters, such as in a header, body, etc, used as containers for embedded objects (See Manola, Section 3).

As per dependent claim 44, Manola discloses the limitations of claim 43 as described above. Manola also discloses that the function-based object models are generated as a function of one or more properties associated with the objects (See Manola, Section 2.2.5).

As per independent claim 45, Manola discloses a system for adapting web content from one format to another including one or more function-based object models, individual function-based object models representing objects that are present in a webpage in terms of one or more of an object's functional properties, where the function-based object model is described in the context of both basic objects and composite objects (See Manola, Sections 2.3.2 and 3).

As per dependent claim 49, Manola discloses the limitations of claim 45 as described above. Manola also discloses that one of the properties includes a hyperlink property pertaining to an object to which another object points via a hyperlink (See Manola, Section 2.2.6, page 29, last paragraph, and Page 30, first example, showing a hyperlink property pertaining to an object to which a basic object, such as "author" points via the hyperlink).

As per dependent claim 50, Manola discloses the limitations of claim 45 as described above. Manola also discloses that one of the properties includes an interaction property pertaining to an interaction method of an object (See Manola, Section 2.3.1, Page 37, second and third bullet items).

As per independent claim 53, Manola discloses software code embodied on a computer-readable storage medium that implements the system of claim 45 (See Manola, Section 3.3, Page 50, first paragraph).

As per independent claim 54, Manola discloses computer architecture for use in adapting web content for display on a computing device including an analysis module for receiving at least one webpage and processing the one webpage to produce one or

more function-based object models that describe functional properties of objects that are contained in the one webpage (See Manola, Section 3.1, first 5 paragraphs).

Manola also discloses one or more rules modules that contain rules that are to be used to adapt content contained in the webpage (See Manola, Section 2.1.4, Page 16, sixth paragraph, "XSL").

Manola also discloses a content adaptation module configured to process the one or more function-based object models in accordance with one or more rules contained in the one or more rules modules to produce a new web page that has been adapted from the one web page (See Manola, Section 2.2.2, Page 22, fifth paragraph, describing rules pertaining to the use of an object).

As per dependent claim 56, Manola discloses the limitations of claim 45 as described above. Manola also discloses that the analysis module is configured to produce function-based object models that pertain to both basic objects and composite objects, basic objects including a smallest information body that cannot be further divided, composite objects including objects that contain other objects (See Manola, Section 2.3.2 describing basic objects, Java applets that perform functions such as playing a sound, and Section 3, describing composite objects, such as pages, which have data structured in clusters, such as in a header, body, etc, used as containers for embedded objects).

As per dependent claim 58, Manola discloses the limitations of claim 56 as described above. Manola also discloses that the analysis module is configured to produce, for composite objects, function-based object models that include values

associated with the following properties; (1) a clustering relationship property pertaining to a relationship among root children of the composite object, and (2) a presentation relationship property pertaining to a presentation order associated with the root children of the composite object (See Manola, Section 3.3.1, page 53, third paragraph).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16-23, 25-28, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manola ("Towards a Web Object Model") in view of Makipaa (U.S. Patent 6,556,217 B1).

As per independent claims 16 and 26, Manola teaches a web content adaption method including analyzing one or more functions associated with a webpage that is configured for presentation on a first device type, the analyzing being performed by generating one or more function-based object models that represent objects including the webpage (See Manola, Section 3.3.3, second paragraph).

Manola also teaches that the objects including one or more basic objects associated with the webpage, basic objects including a smallest information body that cannot be further divided, the basic objects being configured to perform the function of enabling user interaction (See Manola, Section 2.3.2, such as a Java applet that enables a user to hear a sound that is played).

Manola also teaches one or more composite objects associated with the webpage, composite objects including objects that contain other objects, the composite objects having a clustering function that is associated with a webpage author's intention, such as pages, which have data structured in clusters, such as a header, body, etc, used as containers for embedded objects (See Manola, Section 3).

Manola does not teach expressly adapting the webpage for presentation on a second device that is different from the first device type, however, Makipaa teaches adapting a page to be displayed based on the abilities of the device (See Makipaa, Column 3, lines 14-46).

Manola and Makipaa are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the page adaptation to a different device type of Makipaa with the web content adaption method of Manola. The motivation for doing so would have been to present the content to users of various device types in such a manner that the content may be formatted and read as intended by the author of the content and with regard to the different display capabilities of the different device types.

Therefore, it would have been obvious to combine Makipaa with Manola for the benefit of presenting the content to users of various device types in such a manner that the content may be formatted and read as intended by the author of the content and with regard to the different display capabilities of the different device types to obtain the invention as specified in claims 16 and 26.

As per dependent claim 17, Manola and Makipaa teach the limitations of claim 16 as described above. Manola also teaches generating multiple function-based object models each of which being generated as a function of multiple different properties that can be associated with associated objects (See Manola, Section 3.1, first 5 paragraphs).

As per dependent claim 18, Manola and Makipaa teach the limitations of claim 16 as described above. Manola also teaches generating at least one function-based object model for a basic object, the function-based object model being generated as a function of a hyperlink property pertaining to an object to which the basic object points via a hyperlink (See Manola, Section 2.2.6, Page 29, last paragraph, and Page 30, first example, showing a hyperlink property pertaining to an object to which a basic object, such as "author" points via the hyperlink).

As per dependent claim 19, Manola and Makipaa teach the limitations of claim 16 as described above. Manola also teaches generating at least one function-based object model for a composite object, the function-based object model being generated as a function of a clustering relationship property pertaining to a relationship among root children of the composite object (See Manola, Section 3.3.1, Page 53, third paragraph).

As per dependent claim 20, Manola and Makipaa teach the limitations of claim 16 as described above. Manola also teaches generating at least one specific function-based object model that serves to categorize an object (See Manola, Section 2.2.1, Page 19, “Type”, showing a category of a resource of object).

As per dependent claim 21, Manola and Makipaa teach the limitations of claim 20 as described above. Manola also teaches that the generating of the at least one specific function-based object model includes, for a basic object, generating the specific function-based object model based upon properties of the basic object and properties associated with any father or brother objects (See Manola, Section 2.3.1).

As per dependent claim 22, Manola and Makipaa teach the limitations of claim 20 as described above. Manola also teaches that the generating of the at least one specific function-based object model includes, for a composite object, generating the specific function-based object model based upon properties of the composite object and any of its root children (See Manola, Section 2.3.1).

As per dependent claim 23, Manola and Makipaa teach the limitations of claim 20 as described above. Makipaa also teaches that the generating of the at least one specific function-based object model includes a rule-based decision tree to ascertain a category of an object (See Makipaa, Column 3, lines 14-28). Manola and Makipaa are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the rule-based decision tree to ascertain the category of an object of Makipaa with the generation of a specific

function-based object model that serves to categorize an object of Manola. The motivation for doing so would have been to provide a way to adapt content based on the capabilities of the device. Therefore, it would have been obvious to combine Makipaa with Manola and Makipaa for the benefit of providing a way to adapt content based on the capabilities of the device to obtain the invention as specified in claim 23.

As per dependent claim 25, Manola and Makipaa teach the limitations of claim 16 as described above. Manola also teaches one or more computer readable storage media (See Manola, Section 3.3, Page 50, first paragraph).

As per dependent claim 27, Manola and Makipaa teach the limitations of claim 26 as described above. Manola also teaches that he adapting includes doing so in view of one or more networking conditions (See Manola, Section 1.2, Page 3, first paragraph).

As per dependent claim 28, Manola and Makipaa teach the limitations of claim 26 as described above. Makipaa also teaches that the adapting includes doing so in view of one or more user preferences (See Makipaa, Column 5, line 65). Manola and Makipaa are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the user preferences of Makipaa with the web content adaption method of Manola. The motivation for doing so would have been to provide a way to adapt content based on the desires of the user. Therefore, it would have been obvious to combine Makipaa with

Manola and Makipaa for the benefit of providing a way to adapt content based on the desires of the user to obtain the invention as specified in claim 28.

As per dependent claim 55, Manola teaches the limitations of claim 54 as described above. Makipaa does not teach expressly that the content adaption module is configured to produce a new webpage for display on a WAP-enabled device. However, Makipaa teaches adapting a page to be displayed based on the abilities of the device, including WAP-enabled devices (See Makipaa, Column 3, lines 14-46, and Column 2, lines 1-23). Manola and Makipaa are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the page adaptation to a WAP-enabled device type of Makipaa with the web content adaption method of Manola. The motivation for doing so would have been to present the content to users of various device types, such as wireless devices, in such a manner that the content may be formatted and read as intended by the author of the content and with regard to the different display capabilities of the different device types. Therefore, it would have been obvious to combine Makipaa with Manola for the benefit of presenting the content to users of various device types, such as wireless devices, in such a manner that the content may be formatted and read as intended by the author of the content and with regard to the different display capabilities of the different device types to obtain the invention as specified in claim 55.

8. Claims 46-48, 51-52 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manola ("Towards a Web Object Model") in view of Sahota (U.S. Publication 2005/0108637 A1).

As per dependent claims 46-48, Manola teaches the limitations of claim 45 as described above. Manola does not teach expressly that one of the properties includes a presentation property that defines a way in which the object is presented, a semanteme property associated with the content of an object, and a decoration property pertaining to the extent to which an object serves to decorate a webpage. Sahota teaches a presentation property (See Sahota, Page 5 paragraph 0060), a semanteme property (See Sahota, Page 5 paragraph 0060), and a decoration property (See Sahota, Figure 8J, "image"). Manola and Sahota are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the various property types of Sahota with the web content of Manola. The motivation for doing so would have been to present to the user content that includes various types of multimedia data properly formatted to be displayed to the user. Therefore, it would have been obvious to combine Sahota with Manola for the benefit of presenting to the user content that includes various types of multimedia data properly formatted to be displayed to the user to obtain the invention as specified in claims 46-48.

As per dependent claim 51, Manola teaches the limitations of claim 45 as described above. Manola does not teach expressly a clustering relationship property pertaining to a relationship among any root children of an object, however, Sahota teaches such a property (See Sahota, Figure 7, element 710, and Page 9, paragraph 0098). Manola and Sahota are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the clustering relationship property of Sahota with the web content of Manola. The motivation for doing so would have been to allow the objects to be positioned in combination as intended by the author of the content. Therefore, it would have been obvious to combine Sahota with Manola for the benefit of allowing the objects to be positioned in combination as intended by the author of the content to obtain the invention as specified in claim 51.

As per dependent claim 52, Manola teaches the limitations of claim 45 as described above. Manola does not teach expressly that one of the properties includes a presentation relationship property pertaining to a presentation order associated with any root children of an object, however, Sahota teaches such a presentation relationship property (See Sahota, Figure 8O). Manola and Sahota are analogous art because they are from the same field of endeavor of presenting markup language data to a user via electronic devices. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the presentation relationship property of Sahota with the web content of Manola. The motivation for doing so would have been to allow the

objects to be positioned in combination as intended by the author of the content.

Therefore, it would have been obvious to combine Sahota with Manola for the benefit of allowing the objects to be positioned in combination as intended by the author of the content to obtain the invention as specified in claim 52.

As per dependent claim 57, Manola teaches the limitations of claim 56 as described above. Claim 57 additionally incorporates substantially similar subject matter as that of claims 18 and 46-48 above, and is additionally rejected along the same rationale as used in the rejection of claims 18 and 46-48.

Allowable Subject Matter

9. Claims 29-42 are allowed.

Response to Arguments

10. Applicant's arguments, see Request for Continued Examination, filed 31 October 2007, with respect to the rejection of claims 16-23 and 25-58 under 35 U.S.C. 102(a) have been fully considered and are persuasive. The rejection of claims 16-23 and 25-58 under 35 U.S.C. 102(a) has been withdrawn.

Applicant's arguments, see Request for Continued Examination, filed 31 October 2007, with respect to the rejection of claims 31-42 under 35 U.S.C. 103(a) have been fully considered and are persuasive. The rejection of claims 31-42 under 35 U.S.C. 103(a) has been withdrawn.

Applicant's arguments with respect to claims 45-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton, can be reached at (571) 272-4137.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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